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*Sue Bromaghim*  
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March 30, 2006

**CUSTOMER NO. 36257**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Ibrahim ABDULHALIM et al.

Title: Periodic Patterns and Technique to Control Misalignment Between Two Layers

Application No.: 10/699,153 Filing Date: October 30, 2003

Examiner: Layla G. LAUCHMAN Group Art Unit: 2877

Docket No.: TNCR.196US2 Conf. No.: 1463

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant(s) call(s) the documents listed on the enclosed Form PTO-1449 to the Examiner's attention in this patent application.

According to 37 C.F.R. 1.98(2)(ii), copies of the U.S. Patents and U.S. Published Patent Applications documents are not required and are therefore not enclosed. Copies of the listed foreign patent documents or Other Art are enclosed.

Citation of these documents shall not be construed as (1) an admission that the documents are prior art with respect to the invention or inventions claimed in this application, (2) a

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representation that a search has been made (other than as indicated by any cited document), or (3) an admission that the cited information is, or is considered to be, material to patentability as defined in § 1.56(b).

This information disclosure statement is submitted under 37 C.F.R. § 1.97(b) and consequently no fee is believed to be due. The Commissioner is authorized, however, to charge any fee that may be required against Deposit Account No. 502664. This form is being submitted in duplicate.

Respectfully submitted,



James S. Hsue  
Reg. No. 29,545

March 30, 2006

Date

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U.S. Department of Commerce, Patent and Trademark		Atty. Docket No.		Application No.	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		TNCR.196US2		10/699,153	
		Applicant(s)		Conf. No.	
(Use several sheets if necessary)		Ibrahim ABDULHALIM et al.		1463	
APR 03 2006 (Form PTO-1449)		Filing Date		Art Group	
		October 30, 2003		2877	
<b>U.S. Patent Documents</b>					
*Examiner Initial	Document Number	Date	Name	Class	Subclass
1	4,124,458	11-1978	Moeglich		
2	4,200,395	04-1980	Smith et al.		
3	4,332,473	06-1982	Ono		
4	4,703,434	10-1987	Brunner		
5	4,757,207	07-1988	Chappelow et al.		
6	5,216,257	06-1993	Brueck et al.		
7	5,479,270	12-1995	Taylor		
8	5,607,818	03-1997	Akram et al.		
9	5,712,707	01-1998	Ausschnitt et al.		
10	5,738,961	04-1998	Chen		
11	5,757,507	05-1998	Ausschnitt et al.		
12	5,783,342	07-1998	Yamashita et al.		
13	5,808,742	09-1998	Everett et al.		
14	5,872,042	02-1999	Hsu et al.		
15	5,877,861	03-1999	Ausschnitt et al.		
16	5,902,703	05-1999	Leroux et al.		
17	5,939,226	08-1999	Tomimatu		
18	6,023,338	02-2000	Bareket		
19	6,130,750	10-2000	Ausschnitt et al.		
20	6,178,257 B1	01-2001	Alumot et al.		
21	6,561,661 B1	05-2003	Egawa		
22	6,594,024 B1	07-2003	Singh et al.		
23	6,606,152 B2	08-2003	Littau et al.		
24	6,654,131 B2	11-2003	Opsal et al.		
25	6,665,070 B1	12-2003	Yarussi et al.		
26	6,710,876 B1	03-2004	Nikoonahad et al.		
Examiner		Date Considered			
<p><b>*EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.</p>					



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<b>U.S. Published Patent Application Documents</b>								
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	33	2002/0018217 A1	02-2002	Weber-Grabau et al.				
	34	2002/0192577 A1	12-2002	Fay et al.				
<b>Foreign Patent Documents</b>								
							Translation	
		Document	Date	Country	Class	Subclass	Yes	No
	35	WO 01/073824	10-2001	WIPO				
	36	WO 01/097279	12-2001	WIPO				
	37	WO 02/015238	02-2002	WIPO				
	38	WO 02/025708	03-2002	WIPO				
	39	WO 02/025723	03-2002	WIPO				
	40	WO 02/035300	05-2002	WIPO				
	41	WO 02/065545	08-2002	WIPO				
	42	WO 02/069390	09-2002	WIPO				
	43	WO 02/084213	10-2002	WIPO				
Examiner			Date Considered					
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<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	44	Notification of Transmittal of the International Search Report or the Declaration, in corresponding PCT/US02/11026, dated 18 September 2002, 4 pages.	
	45	Written Opinion issued by the IPÉA in corresponding PCT/US02/11026, dated 11 April 2003, 4 pages.	
	46	“Light Diffraction Based Overlay Measurement”, Bischoff et al., Proceedings SPIE, Vol. 4344-28 (2001), 12 pages.	
	47	Lithography Process Control, Tutorial Texts in Optical Engineering, Levinson, SPIE Press Vol. TT28, Chapter 5, “Overlay” (1999), 36 pages.	
	48	“Rigorous Coupled Wave Analysis of Planar-Grating Diffraction”, Moharam et al., Vol. 71, No. 7, July 1981, J. Opt. Soc. Am., pp. 811-818.	
	49	“Exact Eigenfunctions for Square-Wave Gratings: Application to Diffraction and Surface-Plasmon Calculations”, Physical Review B, Vol. 26, No. 6, 15 Sep 1982, pp. 2907-2916.	
	50	“A Modal Analysis of Lamellar Diffraction Gratings in Conical Mountings”, Li, Journal of Modern Optics, 1993, Vol. 40, No. 4, pp. 553-573.	
	51	“In-Process Image Detecting Technique for Determination of Overlay, and Image Quality for ASM-L Wafer Stepper”, Pforr et al., SPIE Vol. 1674, Optical / Laser Microlithography V (1992), pp. 594-608.	
Examiner		Date Considered	
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